

Ethical Scenario 1: Handling Bribes

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Description:

Greg, a recent college graduate, is a newly hired computer programmer. For his first assignment, Greg's boss asked him to write a piece of software to secure emailed documents for internal use by the American division of his company.

Greg's boss was very pleased with the performance of Greg's software, and he sent letters to friends and managers within the company describing Greg's project. Some of the managers wanted to "borrow" Greg's time in order to customize software at overseas locations including Saudi Arabia, Singapore, and Thailand. Since business had slowed at the American offices, Greg's boss agreed, recommending that Greg perform software coding in these other divisions.

Later that evening, Greg saw a program on the local news about an individual in California who handmade similar software available overseas. This individual was currently under prosecution in a federal court for the distribution of algorithms and information which (by law) must remain within the United States for purposes of national security.

At work the next morning Greg mentioned the television program to his boss. His boss told Greg, "Oh, don't worry about those muckraking reporters; they're always trying to dig up dirt. By the way, did I mention that on your way to Thailand I planned to allow for a weekend layover at a nearby resort?"

Questions on Ethics and Professionalism:

Answer the following questions on your own sheet of paper.

1. Define a **bribe**. Is Greg's boss offering him a bribe?
2. What are Greg's ethical responsibilities as the software designer? What are his ethical responsibilities to his company? To himself? As a citizen of the United States?
3. Find a way to satisfy as many of Greg's obligations as possible. Explain why this is his best course of action.

Adapted from "Handling Bribes" Online Ethics Center for Engineering 2/26/2006 National Academy of Engineering Accessed: Tuesday, January 29, 2013

<www.onlineethics.org/Resources/Cases/encryption2.aspx>

Ethical Scenario 2: The Case of the Troubled Computer Programmer

Author(s): William J. Frey

Description:

You are a computer programmer working for a small business that provides specialized financial services to local, mostly small businesses. You have been working for company X for about six months. Recently X has been occupied with reengineering the inventory system of a local hardware chain, ABC Hardware. The objective is to enable ABC to keep better track of their inventory, to be more responsive to changes in customer demand, and to adopt a "just in time" strategy to reduce inventory.

Your supervisor calls you into his office. "Do you know of any existing software products to help ABC keep better track of its inventory?" You mention a particular product that you have worked with in another job and point out that ABC could use it without any modification. The only drawback, you point out, is that this software is somewhat expensive. Your supervisor leans back in his chair, puffs on his cigar and says, "That's no problem. We have that software. Why don't you just install it on ABC's computers?"

You diplomatically indicate that this would violate the licensing agreement X has with the developers of the software. "Do it anyway," your supervisor says. "Nobody's going to find out, and ABC is a very important client. We need to do all we can to keep them happy."

What should you do? (Select one or write down your own solution)

1. Go ahead and install the software on ABC's computers. After all, your supervisor is right: nobody will know what you have done. Furthermore, you haven't been working for this company very long and don't want to be branded a troublemaker.
2. Refuse to do it. Make it clear to your supervisor that he is putting you in a very difficult position, and you are not happy about it. It is illegal, and you don't have to do it. Period.
3. Go ahead and install the software. But be sure to cover yourself first by writing a memo that clearly states that this is illegal, and you are doing it because your supervisor has left you no choice. Establish the case that your supervisor is responsible for the act, and then send several people within the company copies of this memo, including your supervisor.
4. Discuss the matter confidentially and informally with another colleague, preferably another supervisor, possibly someone over your supervisor's head. If this person's reaction is good, then both of you can approach your supervisor and try to talk him out of this course of action. Also, have some concrete alternatives in mind that you can propose, such as using a less expensive program, getting the license for ABC and having X absorb part of the cost, or negotiating a deal with the owner of the program to extend the license to several users at a lower rate.
5. Write down your own solution.

This scenario is based on a case that actually happened. Among the decision options listed above is the one actually taken.

"The Case of the Troubled Computer Programmer" Online Ethics Center for Engineering 2/14/2010
National Academy of Engineering Accessed: Monday, August 26, 2013
<www.onlineethics.org/Resources/Cases/TroubledProgrammer.aspx>

Ethical Scenario 3: The Persistent Engineer

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Part I

You are a civil engineer and work with the AAA (Water and Sewer Authority). While driving through a small town you notice a large storage tank filled with chlorine gas sitting next to an urbanization. The land on which the storage tank is located and the storage tank itself are owned by a local manufacturing company which uses chlorine for various business related purposes.

This is a disaster-in-the-making. Given the right conditions (a leak in the storage tank, wind blowing in a certain direction), an accident could occur that would endanger the lives of the people living in the urbanization. After all, chlorine gas was used during World War I to kill soldiers hiding in trenches. Should you do something about this given that it is not a part of your job and that, as a civil engineer, it is not within your area of expertise?

Part II

You decide to find a way to get the company to move its tank to a safer location. First, you approach officials from the local government; they tell you that they do not have the authority to make the company move the tank. They suggest that you go directly to the company and ask them to move it. But the company tells you that this is none of your business; they point out that you work for the water authority and have no right to tell them where they can and cannot store materials.

Questions:

1. Should you push this matter farther? What could be done given the intransigence of the both the local government and the private company that owns the storage tank?
2. How would you respond to the following argument? This engineer is a civil engineer working for the AAA. The safety or risk of the location and contents of the storage tank are beyond his job and professional qualifications. Hence it is neither obligatory nor permissible for him to try to force the company to change its location. This is someone else's problem. Furthermore, such actions, while well meaning, cost companies and consumers a great deal of trouble and money.
3. Suppose the engineer persisted in his efforts to relocate the tank. Furthermore, suppose that he finally got the company to remove it. (This really happened.) What virtues constitute a good engineer? Could we count persistence among them?

"The Persistent Engineer" Online Ethics Center for Engineering 1/26/2010 National Academy of Engineering Accessed: Monday, August 26, 2013
<www.onlineethics.org/Resources/Cases/persistent.aspx>